

This is a repository copy of *Inhibition of N1-Src kinase by a specific SH3 peptide ligand reveals a role for N1-Src in neurite elongation by L1-CAM*.

White Rose Research Online URL for this paper: <a href="https://eprints.whiterose.ac.uk/id/eprint/112640/">https://eprints.whiterose.ac.uk/id/eprint/112640/</a>

Version: Accepted Version

#### Article:

Keenan, Sarah, Wetherill, Sarah Jane, Ugbode, Christopher orcid.org/0000-0002-6023-8294 et al. (3 more authors) (2017) Inhibition of N1-Src kinase by a specific SH3 peptide ligand reveals a role for N1-Src in neurite elongation by L1-CAM. Scientific Reports. 43106. pp. 1-9. ISSN: 2045-2322

https://doi.org/10.1038/srep43106

### Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here: https://creativecommons.org/licenses/

#### Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



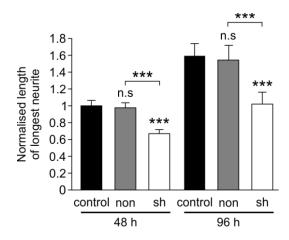
# Inhibition of N1-Src kinase by a specific SH3 peptide ligand reveals a role for N1-Src in neurite elongation by L1-CAM

Sarah Keenan, Sarah J. Wetherill, Christopher I. Ugbode, Sangeeta Chawla, William J. Brackenbury and Gareth J.O.  ${\sf Evans}^1$ 

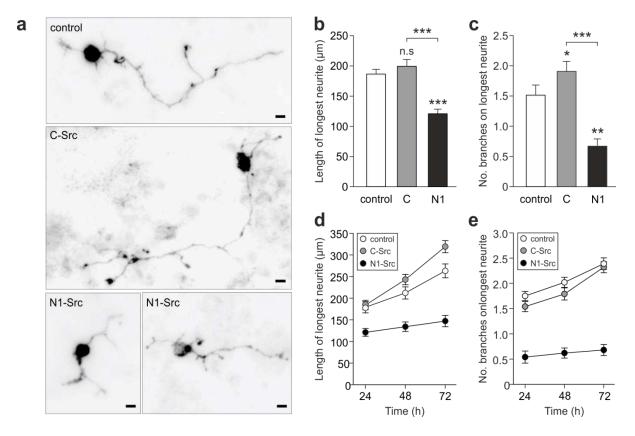
Department of Biology, University of York, Wentworth Way, York, YO10 5DD, UK.

## **Supplementary Information:**

Figures S1 and S2



**Figure S1. shRNA control plasmids do not affect neurite length.** Cultured hippocampal neurons transfected with pSUPER-GFP (control), pSUPER-GFP encoding a non-targeting shRNA (non) or the N1-Src shRNA (sh) were analysed for length of longest neurite at 48 h or 96 h. Data were normalised to the 48 h control and plotted as mean  $\pm$  SEM, n=50-100 neurons analysed per condition. Statistical analysis was performed by Kruskal-Wallis and post-hoc Dunn test (\*\*\* P<0.001; n.s, not significant, compared to control at each time point or the indicated comparisons).



**Figure S2. Overexpression of N1-Src in cerebellar granule neurons disrupts neurite outgrowth.** A. Twenty four hours after plating, cultured cerebellar granule neurons were transfected with CFP (control), C- or N1-Src-FLAG for 24 (B and C), 48 or 72 h prior to fixing and processing for immunofluorescence. Scale bar = 10  $\mu$ m. The NeuronJ plugin for ImageJ was used to quantify the length of the longest neurite (B, D) and branches on the longest neurite (C, E). Data were plotted as mean  $\pm$  SEM, n=3 experiments with 30 cells analysed per condition for each experiment. Statistical analysis was performed by one way ANOVA and post-hoc Tukey test (\* P<0.05; \*\* P<0.01; \*\*\* P<0.001).